

Transportation Infrastructure

New Technologies

- Potential need for dual-use casks
- DOE should look toward industry & international communities for innovations
- Industry unclear about delivery & receipt locations
- Advances in physical & tracking technologies need to be factored in
- Cost-benefit analysis of new technology

Training & Dry Runs

- Begin as soon as possible
- Suggested order:
#1-demonstrations,
#2-training, #3-dry-runs
- Don't re-invent the wheel-
look at international
programs
- Allows DOE to test POC
info/training
- Standardization of training
& materials
- DOE should consider
centralized training center
- Use real equipment in dry-
runs
- Need for regionalized dry
runs

Packages

- **Full-scale Testing**

- Funds requested in 2003, potential use of 2004 transportation allocations

- **Design Standards**

- Cask selection dependent upon current contracts
- Will U.S. regulators adopt international standards

Transportation Mode

- **Barge Shipments**

- Should not be disregarded
- Take into account regional & cultural sensitivities
- DOE needs to decide whether they will use barges

- **Infrastructure**

- What is current infrastructure leading into utilities?
- Ability to solve infrastructure issues will dictate direction
- Responsibility for upgrades

Inspections

- Handled differently for rail and truck
- Politicians need to be involved in plans
- Use of new technology

Safe Operations

Safety Culture

- Adopt safety and quality control culture down to all levels
- Inspections and qualifications (e.g., carrier drivers, equipment operators)
- Transparency

Public Awareness

- Get facts and risk information down to all levels
- Use people trusted by the public to help spread facts
- Make use of scale models, videos, television

Strategic Plan

- Opportunity to comment
- Include routes
- Define safety (acceptable risk levels, safety goals)
- Identify areas where there are disagreements among DOE and states/others

Route and Mode Identification

- Identify routes and modes early on
- Helps everyone know where to focus resources
- Need to balance DOE constraints vs. planning needs
- Debates among various entities on whether DOE should use dedicated trains

Training

- Early on, timely, and continuous
- Adequate funding -- DOE, state, and local
- Use field exercises, dry runs, and specific equipment training
 - Appropriateness of table-top vs. full-scale dry runs
 - Different considerations for rail vs. truck

Best Practices

- Use best practices and lessons learned from past shipping campaigns
 - Domestic and international
 - Industry
- Consider workshops to share models with stakeholders
- Evaluate prudence of going beyond regulatory requirements (look at past campaigns)

Security

- Adhere to applicable Federal regulations
- Consider potential Homeland Security role and regulations
- Balance need to know vs. security
- Look more at diversion/theft
- Consistency in security info in plans
- Establish secure phone/email systems
- Draw from past security/threat analysis

Efficiency

- Consider efficiency along with safety
 - Transit time
 - Number of casks
 - Exposure
 - Costs

General Transportation Plan

- Capture common elements in single DOE-wide plan
- Appendices for separate shipping campaigns

Cooperative Planning Process

Cooperative Planning

- Don't reinvent the wheel
- Use successful shipping campaigns
- Early credible cooperative planning
- States/locals should do public outreach - DOE support
- Single POC for DOE and State for all DOE transportation issues

Cooperative Planning

- Level of need-to-know
- Use existing regulatory process and modify as needed
- Stick to shipping dates (logistics)
- Use work from students/universities - route study Ohio

Actions to Consider

- Make decisions early
 - Institutional issues
 - Regulatory framework
 - ROD for route and mode
 - NEPA and Land Withdrawal for NV Rail
 - Dedicated vs. General Commerce Rail
 - Release 180 c funds
 - Fuel handling/waste inspection process
- Actions
 - Define stakeholders at each level
 - Have 30% planning start (strawman)

Planning Realities

- Elections
- Utilities lawsuit
- Fuel in PFS
- Cask design/planning
 - Work with industry
- Timeframe of license issuance